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ABSTRACT

During 1985 the Colorado Migrant Education Program and the Colorado Migrant Health Program provided a comprehensive health program for students enrolled in migrant summer schools. A total of 1,889 migrant children through age 21 (60% between 5 and 10 years of age) received health screening and physical assessment, referral for diagnosis and treatment of identified abnormalities, case management/followup, and preventive and health promotion/maintenance services. Health services were closely coordinated with day-to-day educational activities and involved parents and other family members. The program employed nearly 200 local physicians, dentists, pharmacists, and allied health providers and a seasonal staff of 17 nurses, 20 dental hygienists, 15 nutritionists, 30 dental students or recent graduates, and 6 nursing students organized into multidisciplinary teams and deployed at all 13 migrant education summer school sites. Health education units were incorporated into the migrant school curriculum and all health team members participated in classroom education, discussion groups, staff in-service training, and "family night" presentations. The report provides information on the service population, service providers, health encounters between provider and student, health screening procedures and outcomes, most frequent diagnoses, health education/activities/curriculum, financial resources, and future plans. Comparative statistics by school site are appended. (LFL)

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FINAL REPORT

MIGRANT EDUCATION HEALTH PROGRAM

- 1985 -

COLORADO DEPARTMENT OF EDUCATION
MIGRANT EDUCATION PROGRAM

COLORADO DEPARTMENT OF HEALTH
MIGRANT HEALTH PROGRAM

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INTRODUCTION

October 30, 1985 marked the completion of the thirteenth consecutive year that the Colorado Migrant Education Program and the Colorado Migrant Health Program have collaborated in the planning and implementation of a comprehensive health program for Migrant Summer School students. This collaboration has continually increased over the past several years as both programs have grown to appreciate that regardless of administrative affiliation, funding resources or individual organizational objectives - both programs share a common mission: to participate in enhancing the physical, mental, social and economic well-being of migrant farmworkers. Both programs acknowledge that this mission requires a major focus on migrant children.

Not only do children of migrant farmworkers face the typical diseases and health problems of childhood but, in addition, they confront numerous health problems and risks associated with their migratory lifestyle and the environmental hazards associated with agricultural work. They also confront numerous social, cultural and linguistic barriers which often preclude their ability to access regular, comprehensive health care. It is clear that maximum educational achievement may be hindered by undiagnosed and untreated health problems - the young migrant child with undiagnosed hearing or vision problems will obviously experience difficulty in learning - regardless of the quality of the educational program presented. Other less obvious but equally significant undetected health conditions such as anemia, respiratory infections, otitis media and dental disease also contribute to listlessness and distraction due to pain which may inhibit the education process. Although it is axiomatic that children in poor health will not achieve their full educational potential, it is also critically important to view the development of healthful lifestyles and health practices as essential elements of each child's educational experience.

Mutually supportive goals and the acknowledgement of the relationship between good health and the migrant child's ability to fully participate in the educational process set the stage of the 1985 Migrant Education Health Program.

1985 continued the tradition of high quality comprehensive health services for migrant school enrollees. Some specific changes and accomplishments are noted below.

For the second year, three Migrant Education Directors participated in the health program planning process prior to the beginning of the school term. This process again provided an opportunity to identify creative, mutually agreeable solutions to long standing problems.

There was increased emphasis on use of the Migrant Health Curriculum units by teachers and other staff members. As a result of a survey of teachers conducted at the end of the 1984 program, units in Personal Hygiene, Wellness and Sex Education were added, increasing the useability of the units.

One of the most successful innovations of the 1985 program was the inclusion of health aides in the health orientation sessions in Denver prior to the Program's opening. Aides that had been employed attended the two and one half days sessions. It afforded the opportunity for the health aides to become aquainted with the goals, objectives, forms and operation of the health program; to receive specific training in health issues; and, to begin team building with the nurses, dental hygienists, nutritionists, dental students and nursing students.

1985 was also the year that preschool services were not offered on a state-wide basis. Close coordination, networking and timely reallocation of resources resulted in a variety of preschool services offered within most of the summer migrant school sites. The summer health teams were thus able to provide comprehensive services to the preschoolers.

Significantly, there was a reduction of 5% in the number of children needing dental services in 1985 from 1984. While it is impossible to draw conclusions because only 30-40% of the children return each year, there can be no doubt that the dental preventive program, including dental sealants can be credited. This is ample justification to continue and increase these dental services.

Another significant finding is the continuing decline in the prevalence of hearing problems among the children. While conditions like scoliosis and vision problems are not necessarily preventable by good health care, many hearing disorders can be prevented by early diagnosis and treatment of ear infections and other ear disorders. Thus it is noteworthy that, while the screening criteria for abnormal hearing have remained constant, the prevalence of hearing disorders has declined gradually from 10.2% in 1982 to 6.7% in 1984, and now to 4.2% in 1985. Given that hearing impairment can be a serious permanent handicap, this is an especially gratifying observation to note in these children.

In a effort to free the professional health staff to provide additional direct services, a system was set up allowing health data to be entered into the MSRTS by record clerks. The success or failure of this mechanism will need to be discussed in the joint agency planning meetings over the winter months.

Because of a reduction in the funding level of Chapter I funds in 1985, the interagency contract reduced the percentage of time the nurses spent in the school setting to 85%. In actuality, when time and effort reports from summer nurses were tabulated they spent 109% of their time in providing health services to the school enrollees. (The program does not reimburse overtime to summer staff.) The shortened programs (an average of two weeks less than in 1984) and the addition of preschoolers in most schools accounted for the need to spend the extra hours in the school.

In 1985, 474 needed immunizations were given to 287 children. This exceeds the performance of the previous three years and is a 36% increase in the number of immunizations given in 1984, a significant accomplishment in a year when schools were open for a shorter time. Yet 187 children (10%) could not receive needed immunizations for lack of signed parental consent, and 245 children (13%) had incomplete immunization records and were never fully evaluated. Strategies will be explored for streamlining the immunization process in the future.

Another innovation in 1985 was a pilot project initiated in the Fort Lupton Migrant Education Summer School in conjunction with Big Sisters of Colorado. Developed by Big Sisters of Colorado, the Life Choices Club concept places 12-14 girls aged 10-13 in a club-like atmosphere three times a week for two hours. A highly refined curriculum is utilized to help the girls experience the power they have to make choices in their lives and about their lives: making friends, setting career objectives, having a family and when, are all topics covered in this highly sensitive program. Visits to various potential places of employment and services provide for exciting shared experiences. Visits to the Health Department and a local Family Planning clinic are a focused part of the curriculum. The evaluation of this experience was highly favorable and may have the potential to satisfy the requests of several years standing from Migrant Education staff who want an effective family life/sex education program for adolescents and pre-adolescents.

The following sections detail the specific activities of the 1985 Migrant Education Health Program. This report is intended to meet the following general objectives:

1. To provide accountability to Migrant Education Program that the health services provided were within the scope and financial estimates of the 1985 contractual agreement;

2. To share with Migrant Education staff and parents information gained about the relative health status and needs of migrant children in Colorado;

3. To provide an information base which will initiate planning efforts directed toward the 1986 Migrant Education Health Program.

SECTION
I
HEALTH PROGRAM OVERVIEW

A. Service Population Profile:

A total of 1,889 migrant children identified as Chapter I enrollees received one or more services from the Colorado Migrant Health Program during the summer months of 1985. The students ranged in age from less than 1 through age 21, with the majority (60.1%) between the ages of 5 and 11. The next largest group (20.4%) were between the ages of 12 and 16. The percentage of preschoolers (ages under one year to four years) increased from 2.8% in 1984 to 8.2% in 1985. The percentage of students 17 years to 21 years of age decreased from 3.2% in 1984 to 2.8% in 1985. 52.3% were female and 47.7% were male. With regard to migrant status, 46% were interstate migrants, 8% were intrastate migrants and 45% were into their third, fourth or fifth year of "settling out". 97.8% were Hispanic, 1.3% were Anglo .2% were Black and .7% were Native Americans.

The following tables reflect the demographic statistics of this population:

TABLE I

AGE DISTRIBUTION OF MIGRANT EDUCATION
SUMMER ENROLLEES
- 1985 -

AGE	FREQUENCY	PERCENT	CUMULATIVE PERCENTAGE
<1	10	0.5%	0.5%
1	13	0.7	1.2
2	23	1.2	1.9
3	31	1.6	3.1
4	80	4.2	4.7
5	174	9.2	8.9
6	192	10.2	18.1
7	206	10.9	28.3
8	217	11.5	39.2
9	194	10.3	50.7
10	160	8.5	61.0
11	151	8.0	69.5
12	128	6.8	77.5
13	88	4.7	84.3
14	65	3.4	89.0
15	55	2.9	92.4
16	49	2.6	95.3
17	26	1.4	97.9
18	13	0.7	99.3
19	9	0.5	99.8
20	2	0.1	99.9
21	3	0.1	100.0%
TOTAL:	1,889	100 %	

TABLE II

SEX OF MIGRANT EDUCATION ENROLLEES - 1985

SEX	FREQUENCY	PERCENT
FEMALE	988	52.3%
MALE	901	47.7
TOTAL	1,889	100.0%

TABLE III

MIGRANT STATUS OF MIGRANT EDUCATION ENROLLEES - 1985

MIGRANT STATUS	FREQUENCY	PERCENT
INTERSTATE	875	46.3%
INTRASTATE	156	8.3
SETTING-OUT	858	45.4
TOTAL	1,889	100 %

DEFINITIONS: Interstate Migrants are children of migratory farm-workers who come to Colorado from outside the state (e.g. Texas) for the express purpose of working in agriculture.

Intrastate Migrants are children of migratory farm-workers who live year-round in Colorado and move within the state for the express purpose of working in agriculture (e.g. from Trinidad to Fort Lupton).

Settling-out Migrants are children of migratory farm workers who have remained in the school district for more than two years, but less than five years.

TABLE IV

ETHNIC STATUS OF MIGRANT EDUCATION ENROLLEES - 1985

ETHNICITY	FREQUENCY	PERCENT
HISPANIC	1,847	97.8%
ANGLO	25	1.3
BLACK	3	0.2
NATIVE AMERICAN	14	0.7
TOTAL	1,889	100 %

B. Service Providers:

The purpose of the contractual relationship between the Colorado Migrant Education Program and the Colorado Migrant Health Program is to assure that students enrolled in Migrant Summer Schools will have available to them a continuum of care which includes: screening and physical assessment for detection of existing and potential health problems, referral for diagnosis and treatment of identified abnormalities, case management/follow-up, and preventive and health promotion/health maintenance services. It was intended that health services be closely coordinated with day-to-day educational activities and involve, to the extent possible, parents and other family members.

In order to provide this full continuum of care, two categories of health providers are required: 1) nearly two-hundred (200) local providers (e.g. physicians, dentists, pharmacist, allied health providers) either in private practice or working with community-based care organizations, and 2) seasonal-hire staff who are recruited nation-wide for the duration of the Migrant Education Summer Schools. During 1985, a number of health providers were employed on this basis. This number included:

17 nurses

20 dental hygienists

15 nutritionists

30 dental students or recent graduates

6 nursing students

These health providers were placed in multidisciplinary teams and deployed in close proximity to all thirteen (13) Migrant Education Summer School sites. This deployment is displayed in the following table:

TABLE V

DEPLOYMENT OF SEASONAL HEALTH PROVIDERS

- 1985 -

Site	Nurses	Nutritionists	Dental Hygienists	Dental Students	Nursing Students
Ft. Lupton	1.5	2	2	5	1
Brighton	1.5	1	2	5	1
Longmont	1	1	2	4	0
Boulder	.5	.5	.5	0	0
Ft. Collins	1	1	2	3	1
Eaton	2	1	2	3	1
Ft. Morgan	7	1	1	1	0
Lamar	1	1	.5	0	0
Rocky Ford	2	2	2	1	0
Pueblo	1	.5	1	2	0
Alamosa	2	1	2	3	1
Delta	1	.5	1	2	1
Grand Jct.	.5	.5	1	1	0
TOTAL	17 (15.7 FTE)	15 (13 FTE)	20 (19 FTE)	30	6

TABLE VI

NUMBER OF PATIENT ENCOUNTERS
- 1985 -

SERVICE CATEGORY	CATEGORY FREQUENCY	PERCENT OF TOTAL	TOTAL
MEDICAL		5,848	43.6%
New	1,792		
Repeat	4,056		
DENTAL		6,305	47.0
New	1,755		
Repeat	4,550		
NUTRITION		1,267	9.4
New	914		
Repeat	353		
TOTAL	13,420	13,420	100%

43.6% of all encounters were for medical reasons, and 47.0% were for dental . It is significant to note that nutritionists play an integral role in performing many medical-screening activities which are not reflected in the above table.

It is also of interest to note the sites at which these services were delivered to migrant children. The following table reflects this information:

TABLE VII

PATIENT ENCOUNTERS
BY SITE OF SERVICE
- 1985 -

SERVICE SITE	FREQUENCY	PERCENT
MIGRANT EDUCATION SCHOOLS	8,763	65.3%
MIGRANT EDUCATION NIGHT SCHOOLS	309	2.3
DENTAL OFFICE	2,367	17.6
PHYSICIAN OFFICE	486	3.6
STUDENT'S HOMES	1,107	8.3
CMHP CLINIC	304	2.3
HOSPITAL	17	0.1
HEALTH DEPARTMENT	67	0.5
TOTAL	13,420	100%

As is evident from the preceding table, sixty-seven percent (67.6%) of all patients were offered services at a school site. Offices of medical and dental practitioners were the second most frequent sites of services (21.2 %) followed by services delivered in the home (8.2%).

It is of additional interest to examine where services were delivered by individual health practitioners. The following tables reflect the sites of service delivery by nursing, dental hygiene and nutrition personnel:

TABLE VIII

NURSING* ENCOUNTERS BY
SERVICE DELIVERY SITES
- 1985 -

SERVICE SITE	FREQUENCY	PERCENT
MIGRANT EDUCATION SCHOOLS	4,817	90.7%
MIGRANT EDUCATION NIGHT SCHOOLS	149	2.8
HOME	189	3.6
CMHP CLINIC	77	1.4
OTHER**	79	1.5
TOTAL	5,311	100%

NOTES: *Includes Migrant Education nurses, CMHP nurses, nursing students and health aides.

**Includes physician's office, local health departments, dental offices, hospital.

TABLE IX

DENTAL HYGIENE ENCOUNTERS
BY SERVICE DELIVERY SITES
- 1985 -

SERVICE SITE	FREQUENCY	PERCENT
MIGRANT EDUCATION SCHOOLS	3,489	88.4%
MIGRANT EDUCATION NIGHT SCHOOLS	125	3.2
HOME	88	2.2
DENTAL OFFICE	111	2.8
CMHP CLINIC	135	3.4
TOTAL	3,948	100%

NOTE: This table does not reflect the encounters by dentists and dental students.

TABLE X

NUTRITION ENCOUNTERS BY
SERVICE DELIVERY SITE
- 1985 -

SERVICE SITE	FREQUENCY	PERCENT
MIGRANT EDUCATION SCHOOLS	429	32.4%
MIGRANT EDUCATION NIGHT SCHOOLS	32	2.4
HOME	825	62.3
CMHP CLINIC	39	2.9
TOTAL	1,325	100%

It is significant to note that approximately ninety-two percent (92%) of all nursing and dental hygiene encounters took place at a Migrant Education school site. This contrasts with the nutrition encounters where only thirty-five percent (35%) took place in school sites and more than sixty-two percent (62%) in the students' homes. This is reflective of the high priority placed by the nutrition component on engaging the whole family in nutrition services. Additionally, the nutritionists frequently address other health concerns with the family, after consultation with the nursing and dental components, during home visits.

SECTION
II

HEALTH STATUS OF
MIGRANT EDUCATION STUDENTS
- 1985 -

A. Health Screening:

Over the past several years of close interaction with the migrant child, the Colorado Migrant Health Program has come to anticipate which health problems identifiable by screening are most prevalent within this population. These conditions are as follows:

1. Abnormal growth (e.g. overweight, underweight)
2. Iron deficiency anemia
3. Elevated blood pressure
4. Diminished hearing
5. Diminished vision
6. Scoliosis
7. Dental disease
8. Tuberculosis

In order to identify the presence of these conditions as soon as possible (so that intervention may be offered while the children are available for services), all health team members participate in screening clinics conducted during the first week that children attend migrant summer schools. Screening is offered thereafter on a weekly basis to identify health problems in students who begin attending at a later date. The following is a brief summary of the screening procedures offered:

Height and weight measurements are taken on all Chapter I children. Results are plotted on a National Center for Health Statistics (NCHS) growth chart. "Abnormals" result in a diagnosis of underweight, overweight or short stature. Underweight is defined as being at the 10th percentile or below, weight for height, on the growth chart. Overweight is defined as at the 90th percentile or above, weight for height. Short stature is defined as height for age at the 10th percentile or below . The latter diagnosis is controversal since it is not known with reliability if relative "short stature" is determined primarily by genetic or environmental factors.

The reason that short stature is included in these protocols is that it is used as an indicator of abnormal nutritional status in other programs, such as the Women, Infants and Children (WIC) Supplemental Food Program. And, since it may be indicative of a nutrition problem, it does warrant follow-up. Follow-up for all nutritional problems, consists of diet assessment, assessment of the child's medical history and individual counseling with the child and the child's family.

Hematocrits are done to assess the possibility of iron deficiency anemia. Children having borderline anemia (37-32%) and are followed-up by the nutritionist. Children with clinical anemia (<34%) are referred to a nurse for treatment with iron supplements, and also are followed-up by the nutritionist. Follow-up consists of diet assessment, assessment of the child's medical history and individual counseling with the child and the child's family. Children with abnormal hematocrits are rescreened at intervals during the summer to assess whether or not the anemia has been resolved or improved.

Blood pressures are taken for two reasons. The first reason is that elevated blood pressure may indicate serious disorders such as kidney disease or cardiovascular disease. The second reason is that blood pressure measurements serve as baseline data on a child, so that the child's "normal" can be established for future reference. Abnormal blood pressure is followed-up by the Migrant Education nurse. The nurse rescreens the child several times and if the blood pressure remains elevated, refers the child to a physician. The nutritionist may do diet counseling, if it is determined that the elevated blood pressure is complicated by the child's nutritional status (e.g. obesity).

Hearing screening is usually conducted by the nurse on all testable students. When a child fails a hearing screening, the child is rescreened on another day unless there is evidence to suggest the presence of otitis media. (If there is such evidence, the nurse will immediately refer the child to a physician, and rescreen the child's hearing after resolution of the infection.) Children who fail screening twice are referred to a local audiologist for further diagnostic evaluation.

Scoliosis screening is done on all 11 year old children by the Migrant Education nurse. This screening procedure is done to detect any lateral curvature of the spine which, if present, may worsen during the adolescent growth spurt. Abnormals are rescreened, and, if still abnormal, are referred to a medical provider for evaluation and possible x-ray. If there is need for immediate intervention, the child is then referred to the Handicapped Children's Program.

Vision screening is done using a Snellen ("E") chart. Abnormal screenings are referred to local providers if rescreening indicates the need.

Dental Screening consists of an examination of the teeth and oral structures. The purpose of this screening is to identify those children in need of professional dental treatment.

Dental screening is done by one of the dental providers, most often the dental hygienist. At the time of screening, the children are prioritized according to the severity of need. Children with the most serious treatment needs are referred first for care, with less serious conditions being referred as time and financial resources allow. Because dental problems are related in part to poor nutrition and oral hygiene practices, referrals to the dental hygienist and/or nutritionist for counseling and education are also made at the time of screening.

PPD (Purified Protein Deriviative) is a skin test which determines exposure to the tuberculosis bacillus. This screening procedure is arranged by or performed by the Migrant Education nurse on students who have never been tested and on all kindergarteners and 7th graders who have not been tested within the past three years. The skin test is read 48 to 72 hours later. Children with positive tests are referred to local health departments or county nurses for chest x-rays and other follow-up. This procedure requires signed parental consent and is usually carried out as soon as the consents are completed.

Physical Exams are not routinely done on school-age children every year. Only children with symptoms which indicate the need are referred for a physical.

B. Screening Outcomes:

During the 1985 Migrant Education Summer School sessions, a total of 1,700 children received most screening services. It should be noted, that the limited purpose of screening these children is to identify which children have health conditions which require follow-up intervention. Unfortunately, at this time there is no comparable baseline data which may be utilized to describe the health status of this population vis-a-vis a non-migratory Hispanic student population.

The following table reflects the "abnormal" findings identified through the screening process in 1985:

TABLE XI

MIGRANT EDUCATION
SCREENING OUTCOMES
- 1985 -

SCREENING PROCEDURE	NUMBER SCREENED	NUMBER ABNORMALS	PERCENT ABNORMAL
HEIGHT/WEIGHT:			
Overweight	1,736	268	15.2%
Underweight	1,736	114	6.6
Short Stature	1,736	372	21.4
HEMATOCRIT	1,736	474	27.3
BLOOD PRESSURE	1,690	4	0.2
HEARING	1,724	73	4.2
SCOLIOSIS	190	24	12.6
VISION	1,683	271	16.1
DENTAL	1,719	1,064	61.9

As is readily apparent from the preceeding table, dental disease is the major health problem for migrant children with 1,064 students (or 62%) having identifiable dental problems. 94 (15.5%) were identified as requiring immediate referral for relief of pain and/or treatment of dental infection.

The following preliminary statements may be offered:

- 65.7% of students with identified dental problems received complete treatment;
- 12.0% of students with identified dental problems received partial treatment;
- there were a total of 2,367 visits to dental offices, an average of 2.9 visits per child receiving treatment;
- 8.2% of students with identified dental problems were not referred for treatment because their dental problems were low priority;
- 1.1% of students with identified dental problems were not referred because parents did not sign parent consent form or they had their own dentist.
- 8.9% of students with identified dental problems were referred but moved before dental treatment could be initiated;
- 4.0% of the students did not receive treatment because of poor attendance. This was especially true of students in the evening program.

In addition to treatment offered for acute and chronic dental problems, substantial emphasis is placed on preventive dental services. During the 1985 summer school session, a total of 1,336 students received dental prophylaxis and fluoride application treatments. This represents 78% of the children receiving dental screenings. Portable dental equipment made it possible for the dental hygienist to provide the majority of this treatment within the school setting.

Pit and fissure dental sealants were provided again this year. A pilot project in 1983 in Longmont, Brighton and Fort Lupton proved an overwhelming success. Expansion of the program over 1983 and 1984 continued. One dental hygienist with specialized equipment was hired to travel from school to school placing sealants.

Sealants are a clear resin material that is placed on acid etched chewing surfaces of teeth. The material flows into the deep pits and fissures and hardens. Sealants are effective in preventing decay in these surfaces up to five years. (Fluorides protect the smooth surfaces of the teeth from decay. Therefore, they will also be continued.)

National statistics indicate more than 84% of dental caries in 5-17 year old children occur in pits and fissures of the tooth's chewing surfaces. An initial survey of teeth filled this past summer indicates 76% were occlusal surface fillings. If these teeth had been sealed in previous years and the sealants retained, these fillings would not have been necessary.

Statistics from the past years areas follows:

	1983	1984	1985
# Children Receiving Sealants	140	449	726
# Sealants Placed	627	2,304	3,738

SMOKELESS TOBACCO:

Usage of smokeless tobacco has become a major problem in the nation's school age population. Smokeless tobacco includes both "Chewing": placing a quid of tobacco along the cheeks and gums or dipping snuff: placing a pinch of tobacco between the cheeks and gums. The by-products of smokeless tobacco are extremely irritating to the oral tissues. Oral manifestations include leukoplakia a pre-cancerous lesion, verrucous cancer, bad breath, abrasion of teeth, advanced periodontal destruction and increased caries from sugars present in the tobacco. Nicotine is also habit-forming and affects the nervous, heart and circulatory systems.

A survey was conducted this past summer randomly to ascertain if use of smokeless tobacco was a problem in the migrant school age population. 215 males and 215 females ranging from ages 5 to 20 were included. Of the females, 10 (5%) had used smokeless tobacco and only 2 (0.1%) are currently using it. Of the males, 45 (21%) had used smokeless tobacco and 12 (6%) are currently using it.

While these statistics are not alarming when compared with the school age population at large, the current and future potential danger cannot be ignored. Education on the dangers of smokeless tobacco will become a standard component of the program in future years.

DMFS STUDY:

During the summers of 1983, 1984 and 1985 summer migrant schools participated in a study of the oral health of migrant children in Colorado. The cooperation of the school staffs is gratefully acknowledged.

The purpose of this study was to evaluate the dental disease profile of the migrant children, using both prevalence and incidence data for dental caries, to examine the impact of the preventive and restorative programs, and to identify specific groups of children requiring more aggressive preventive measures.

Decayed, missing and filled surfaces (DMFS) of the teeth were recorded on 392 children ages 6-15 in seven communities in 1983, and on 571 children in eight sites in 1984 (six of these were the same sites as in 1983). Incidence data were collected on an additional 35 children returning to four of the sites in 1985 and derived from analysis of computer printout of 65 children examined in both 1983 and 1984. In 1984, GI scores were also collected on 707 children and PHP scores on 403.

It should be noted that only about one-fifth of the 1984 migrant child population were returnees. Therefore, the 1983 and 1984 data represent two different groups of children.

CONCLUSIONS/RECOMMENDATIONS OF THE SURVEY:

1. Migrant children in Colorado still exhibit higher DMFS/dfs scores than non-migrant children nationally or in Region V. The decayed component is still a significant percentage of these scores.

2. Occlusal decay comprises the majority of the decay seen in permanent teeth, indicating a need for an aggressive preventive effort using sealants.

3. Smooth surface decay still represents a significant percentage of decay, thus, warranting some type of fluoride supplementation program.

4. Determination of program effectiveness is difficult in migrant populations unless longitudinal studies on returning children are conducted.

The results of this survey are being presented at the annual meeting of the American Public Health Association in November 1985. A complete copy of the survey and the paper presented are available upon request from the Colorado Migrant Health Program Office.

It is important to note that the conclusion's recommendations are right on line with the scope of the current program. No major changes are necessary.

GI SURVEY:

Periodontal disease, disease of the soft tissues surrounding the teeth, is becoming more prevalant nationally and is manifesting itself at earlier ages. This is also true of the migrant population. Periodontal disease, for the most part, can be prevented by proper brushing and flossing.

Gingival Index (GI) scores were recorded in 1984 prior to preventive education in the classroom and individually. In 1984 the baseline score was .75. Post-intervention (after education and instruction) scores were .49. This is a significant reduction in diseased gingival tissues. (1985 results are not available.) Yet, results of the survey point out how important it is for teachers using the curriculum boxes and dental staff individually to continue dental health education. It does make a difference!

NUTRITION PROBLEMS:

In order of significance, the second most prevalent abnormalities were related to nutritional problems. Screening results coupled with physical examinations, health histories, diet assessments and child/parent complaints identified 977 nutritional problems requiring follow-up. 840 (86%) of these problems were provided follow-up services by nutritionists.

The rank of prevalence of nutrition problems within the Migrant Education summer school population is as follows:

1. Anemia (borderline and clinical)
2. Short stature
3. Overweight
4. Underweight
5. Other nutrition problems

The category "other nutrition problems" includes: food allergies, chronic diarrhea, diabetes, hypertension, dental problems and improper eating behavior (such as high intake of refined carbohydrates).

C. Most Frequent Diagnosis:

Analysis of the diagnostic codes placed on authorizations and encounter forms validates the findings identified during the screening process.

The following table reflects the rank order of incidence of health problems identified in 1985:

TABLE XII
RANK ORDER OF MOST
FREQUENT HEALTH PROBLEMS
- 1985 -

RANK	DIAGNOSTIC CATEGORY	EXAMPLES (In order of incidence)
1	Dental Problems	a.) dental decay (caries) b.) gum/gingival problems c.) dental/oral trauma d.) bottlemouth caries
2	Nutrition Problems	a.) anemia b.) short stature c.) overweight d.) underweight e.) other (dental problems, food allergies, diabetes etc.)
3	Injuries	a.) abrasion/open wound b.) sprain c.) foreign body d.) insect bite e.) burn f.) bruise, contusion g.) fracture
4	Eye Problems	a.) vision impairment b.) conjunctivitis (pinkeye) c.) stye
5	Infective and Parasitic	a.) pediculosis (lice) b.) strept throat c.) tuberculosis d.) chickenpox e.) tinea (ringworm) f.) scabies
6	Respiratory Illness	a.) pharyngitis (sore throat) b.) upper respiratory infection/cough c.) tonsillitis d.) asthma

7	Ear	a.) diminished hearing b.) otitis media c.) serous otitis d.) otitis externa (swimmer's ear)
8	Skin	a.) cellulitis/wound infection b.) impetigo c.) contact dermatitis d.) rashes
9	Digestive Problems	a.) abdominal pain b.) nausea/vomiting c.) diarrhea

SECTION
III

HEALTH EDUCATION

As noted in the introduction of this report, in order to enhance the general health status of the migrant farmworker population it is necessary to place a high priority on assisting migrant children to develop healthful lifestyles and health practices.

A. Health Education Curriculum:

The major effort in 1985 was again directed toward the incorporation and integration of health education units on selected health education topic areas into the migrant school curriculum. The topic areas selected are Dental Health, Nutrition and Safety Education. Three additional units were added this year-Personnel Hygiene, Wellness and Sex Education.

The units were developed for Level I (lower elementary) and Level II (upper Elementary) and Level III (grades 6-8). Each topic area and level have two to four classroom lessons developed around specific, measurable learning objectives. Each lesson contains:

1.) A concept sheet for the teacher with basic background information on the subject matter;

2.) Learning objectives and related bilingual activities;

3.) Supplemental materials which include hand-out pamphlets, student worksheets, and related activities in other classes;

4.) Evaluation instruments.

The health education units were utilized in every summer school except Burlington. The statistics on the following page do not include health education sessions conducted by migrant school staff. This accounts for the apparent reduced number of group classroom sessions in 1985. Initial examination of the data indicates that the units were well received by teachers and health team members alike.

B. Health Education Activities - 1985

All health team members were charged with the responsibility of engaging in a number of health promotion activities. These activities involved participation in classroom education, discussion groups, staff in-service training and presentations at "family nights".

During the summer of 1985, classroom education and small group sessions involved participation of 3,331 attendees, or an average of 1.8 health promotion encounters per child. 55 staff in-service training sessions involved 788 attendees. In addition, 27 family night presentations were offered involving a total estimated audience of 1,311.

Staff inservice training sessions were designed to provide teachers and other education staff members with sufficient skills to deal with minor health problems and to recognize signs and symptoms of health problems in children so that early intervention is possible. Family night presentations included discussions of screening procedures, explanation of high blood pressure, and "Picture of a Happy Family", a wellness oriented presentation featuring photographs of healthy families together. In many sites, the health team offered select screening procedures for parents.

Group sessions conducted by nursing personnel included classroom teaching directed toward specific health problems as well as broader topics related to health promotion and safety. Included topics were safety and first aid, anemia, choking and the Heimlich manuever, taking a temperature, infections, and proper use of medications.

Classroom sessions developed by the dental hygiene staff covered the following topics: proper brushing and flossing, dental nutrition, what happens in visits to dental offices, the etiology of dental disease and the structure and function of teeth.

Staff inservice training by dental hygiene personnel included: the relationship between dental disease and good health, proper brushing and flossing, the etiology of dental disease, bottlemouth caries and the incorporation of dental health education into academic curriculum. In addition, dental hygienists participated in six (6) dental health promotion sessions during family nights.

Group sessions developed by nutritionists included both classroom teaching and discussion groups for children with specific nutrition problems. Specific topics included: healthy snacking, balanced diets, the relationship between nutrition and health, high iron foods and anemia.

Family night presentations included: how to identify nutrition related health problems, the relationship between nutrition and health, and how to diet using culturally acceptable foods.

TABLE XIII

HEALTH EDUCATION/PROMOTION
ACTIVITIES
- 1985 -

EDUCATION CATEGORY	GROUP/CLASS-ROOM SESSIONS	# PERSONS ATTENDING	STAFF IN-SERVICES	# PERSONS ATTENDING	FAMILY NIGHT PRESENTATIONS	# PERSONS ATTENDING
Nursing	70	1,263	31	435	15	435
Dental	54	852	8	114	6	470
Nutrition	88	1,216	16	249	6	406
TOTALS	212	3,331	55	798	27	1,311

SECTION
IV

FINANCIAL RESOURCES

The financial resources provided by the Colorado Department of Education Migrant Education Program in support of the 1985 health program were deployed in the following cost categories. It should be noted that these figures are the best estimate as the final accounting report is not available yet. It is significant to restate that in 1985, the Colorado Department of Health waived the indirect cost allowance on all expenditures through June 30, 1985. This saving was rebudgeted for direct expenses.

TABLE XIV

BUDGET ALLOCATION BY
SERVICE CATEGORY

COST CATEGORY	AMOUNT ALLOCATED	PERCENT OF BUDGET
Medical Care	$ 21,158	19 %
Nursing Services	47,205	43
Dental Care	16,306	15
Dental Hygiene Services	10,167	9
Nutrition Services	15,164	14
TOTAL	$ 110,000	100 %

NOTES:

1. "Medical Care" includes medical treatment provided by local physicians, clinics, laboratories and hospitals as well as costs of medications.
2. "Nursing Services" includes nurse's salaries, travel, supplies and costs associated with orientation.
3. "Dental care" includes dental treatment provided by local dentists, as well as stipends paid to dental students.
4. "Dental Hygiene Services" includes salaries, travel, dental supplies and costs associated with orientation.
5. "Nutrition services" includes salaries, travel, supplies and costs associated with orientation.
6. Indirect costs are prorated into each category.

As is evident from the proceeding table, 62% of the CDE total budget was allocated for Medical Services, 24% for Dental Services and 14% for Nutrition Services. Based upon the enrollment figure of 1,889 students, the average cost per student for the full range of services offered was $58.23.

It is significant to note that although services were offered to Migrant Education Students at a cost to the Department of Education of $110,000.00, the total value of services offered far exceeded this amount. This is due to contributions from other sources of revenue and the cost-effective mechanisms which have been developed over the past several years. The dental program offers a number of tangible examples of this cost-effectiveness:

1. When dental services are provided by a dental student under the direct supervision of local dentists, the cost to the program is only one-third (1/3) to one-half (1/2) the usual and customary charge;

2. When dental services are provided at the Mesa County Health Department, there is no charge beyond the monthly stipend paid to the dental graduate who staffs the clinic.

3. Both Plan de Salud del Valle and Sunrise Community Health Center provide comprehensive dental services to migrant students in Adams, Weld and Boulder Counties in return for minimal payments.

(As a result of the three examples presented above, for an investment of $8,096 CDE funds and $39,061 other funds for a total of $47,157, in 1985, migrant students received dental treatment valued at $134,233 - a net savings of $87,076 or 64.9%.)

4. Dental prophylaxis (cleaning) and topical fluoride applications are provided by dental hygienists in the migrant school with portable equipment. A total of 1,336 prophylaxis and fluoride applications were provided in 1985. In the private sector these services would cost $30.00 per patient or a total of $40,080. The total cost to CDE for dental hygienists in 1985 was $6,589 -- 16.4% of the value of just these services alone -- and this does not account for more than one-half (1/2) of the services provided by hygienists (other duties include dental screening, case management, patient/parent education, classroom education, staff in-service training, etc.)

The following table provides supportive documentation to the statements above:

TABLE XV
DENTAL TREATMENT COSTS
VALUE OF TREATMENT, EXPENDITURE BY SOURCE
- 1985 -

SITE	ACTUAL VALUE OF TREATMENT PROVIDED	ACTUAL AMOUNT PAID FOR TREATMENT	AMOUNT PAID BY CHAPTER I FUNDS	AMOUNT PAID BY CMHP OR MCH FUNDS
Brighton	$ 15,000	$ 2,250	$ 0	$ 2,250
Fort Lupton	16,000	2,250	0	2,250
Longmont	17,161	1,114	0	1,114
Eaton	16,975	4,082	946	3,136
Fort Collins	10,821	5,438	2,846	2,592
Fort Morgan	3,233	1,908	0	1,908
Burlington	389	389	0	389
Lamar	8,590	6,673	4,103	2,570
Rocky Ford	13,382	6,682	[redacted]	6,682
Pueblo	8,717	3,868	0	3,868
Alamosa	11,860	6,633	119	6,514
Grand Junction	3,474	1,019	0	1,019
Delta	7,260	3,617	82	3,535
Boulder	1,371	1,234	0	1,234
TOTAL:	$ 134,233	$ 47,157	$ 8,096	$39,061

Major savings are also realized in the Medical Cost category. For example:

- Several private physicians and local medical practices offer reduced rates for migrant children enrolled in Migrant Education (range from 15% - 30%);

- Again, Plan de Salud del Valle and Sunrise Community Health Center offer medical services to migrant children at minimal cost per patient visit (average $5.00);

- Local hospitals have agreed to accept minimal payments in return for both out-patient and in-patient hospital services;

- Local pharmacists have agreed to offer services in accordance with MAC (maximum allowable costs) guidelines;

- Local health departments offer a multitude of services at minimal or no cost (e.g. immunizations).

SECTION V

PREPARING FOR - 1986

There are currently (November, 1985) a number of uncertainties still faced by both the Migrant Health Program and the Migrant Education Program in Colorado. Some proposals currently under consideration would result in major downward adjustments in funding levels and concurrent decreases in both educational and health services that could be offered in the near future.

In order to assure that the health services delivery plan for 1986 is responsive to the needs and resources of both programs, a task force composed of representatives of both will be formulated again during the winter of 1986. The task force will serve principally as a planning body and will facilitate the setting of priorities for health programming within the Migrant Education setting should major adjustments be necessary. In addition to providing a response mechanism relative to the changing conditions on the federal scene, this body will also assist in formulating approaches to the following issues:

1. Although the day school program is well established and runs fairly smoothly, there is a need to jointly establish a responsive health program for the adolescent and night school programs.

2. The issue of migrant preschool services in Colorado remains unresolved. All involved agencies will need to continue working together on this issue to assure that preschoolers are served.

3. Exploration into more cost-effective and time efficient mechanisms to deliver health care services are under way. For examples, the nursing consultant is considering arranging for local providers to come to the schools shortly after screening to evaulate students with specific abnormal findings. Such a system would reduce the number of students needing physician appointments outside the school setting and would at the same time reduce costs.

4. Other strategies need to be explored to enable nurses and nursing students to have more time available outside the school setting for home visits. Such interaction is critical for promoting involvement and participation of family members in the ongoing health care of their children. Efforts to accomplish this in 1985 yielded a 9% increase in total home visits by nurses, but more is needed.

5. Immunization assessment and delivery remains a time consuming process. In order to expedite this, it may be useful to a.) provide greater clarity and stress upon the role recruiters can play in obtaining records and signed consents, and b.) prioritize active interstate migrnts and preschool-age children. (This places at a lower priority children who are already attending school within Colorado and who thus must comply with Colorado school immunization requirements.)

6. The issue of evening health clinics and services for adults and parents of enrollees needs to be reexamined by the Joint Task Force to determine the feasibility of continuing this service.

7. We need to develop a way to continue to increase the use of the Health Education Curriculum and update them as necessary.

8. Life Choices Clubs (Big Sisters Program)

   Although the pilot project in Fort Lupton during the summer of 1985 was highly successful, it is uncertain if this project will be able to be repeated or expanded in 1986. This will be a major focus of the Migrant Education/Migrant Health task force this winter.

Although the next two years will no doubt present us with a host of uncertainties perhaps more far reaching than any in the past, it is important that we acknowledge the track record of successes that we have accumulated over the past several years of close collaboration. This track record and a renewed commitment to our mutual goals for migrant families will allow us under any new circumstances to continue providing a range of services which neither organization could provide alone. We may continue to take pride in the fact that we have together evolved a professional relationship that serves as a model for other migrant-serving states.

APPENDIX

COMPARATIVE STATISTICS BY SCHOOL SITE 1985

The following section is composed of various tables which outline by school site the incidence and follow-up of specific medical, dental, and nutrition problems. These tables are presented to provide supporting data for the summary statistics which appear in the body of this report. This information may also be utilized in planning efforts directed toward maintaining and enhancing current efforts.

Careful attention by Migrant Education Directors and Principals to the statistical comparisons from school to school would be appreciated. Examination of the tables reveals variations from site to site. A number of factors can contribute to these variations, for example, the enrollment of a large number of seasonal farmworkers may decrease the incidence of health related problems since the children may receive ongoing care. Any comments and recommendations you may have concerning these variations would be appreciated.

TABLE XVI

TB TESTING (PPD) - RESULTS AND FOLLOW-UP
- 1985 -

	SCREENED	ABNORMALS IDENTIFIED		ABNORMALS FOLLOWED-UP	
		NUMBER	PERCENTAGE	NUMBER	PERCENTAGE
Brighton	32	2	6 %	2	100 %
Fort Lupton	38	0	0	0	0
Longmont	20	4	20	4	100
Eaton	82	10	12	10	100
Fort Collins	27	0	0	0	0
Fort Morgan	13	0	0	0	0
Burlington	0	0	0	0	0
Lamar	55	0	0	0	0
Rocky Ford	13	1	8	1	100
Pueblo	18	0	0	0	0
Alamosa	45	2	4	2	100
Grand Junction	20	1	5	1	100
Delta	30	7	23	7	100
Boulder	6	1	17	1	100
TOTAL:	399	28	7 %	28	100 %

TABLE XVII

IMMUNIZATIONS

- 1985 -

SITE	IMMUNIZATION STATUS ASSESSED	CHILDREN IMMUNIZED	TOTAL # OF IMMUNIZATIONS GIVEN
Brighton	167	21	38
Fort Lupton	159	30	44
Longmont	108	30	42
Eaton	234	15	46
Fort Collins	135	38	59
Fort Morgan	47	4	4
Burlington	58	3	3
Lamar	127	30	53
Rocky Ford	206	16	31
Pueblo	77	5	7
Alamosa	280	36	83
Grand Junction	63	12	14
Delta	93	43	46
Boulder	34	4	4
TOTAL:	1,768	287	474

TABLE XVIII

VISION PROBLEMS - INCIDENCE/FOLLOW-UP
- 1985 -

SITE	# SCREENED	ABNORMALS IDENTIFIED		ABNORMALS FOLLOWED-UP*	
		NUMBER	PERCENTAGE	NUMBER	PERCENTAGE
Brighton	157	18	16 %	16	89 %
Fort Lupton	192	40	21	24	60
Longmont	114	18	16	11	61
Eaton	222	29	13	9	31
Fort Collins	107	34	32	19	56
Fort Morgan	47	12	26	8	67
Burlington	48	3	6	3	100
Lamar	119	22	18	21	95
Rocky Ford	203	30	15	20	67
Pueblo	72	12	17	11	92
Alamosa	220	25	11	13	52
Grand Junction	63	11	17	9	82
Delta	86	5	6	5	100
Boulder	33	12	36	12	100
TOTAL:	1,683	271	16 %	181	67 %

* This was reported as referrals to an outside provider (optometrist or opthalmologist) to determine need for or provide glasses. Some referrals were deferred for minimal vision abnomalities and for children who had glasses they would not wear.

TABLE XIX

HEARING PROBLEMS - INCIDENCE/FOLLOW-UP
- 1985 -

SITE	# SCREENED	ABNORMALS IDENTIFIED		ABNORMALS FOLLOWED-UP*	
		NUMBER	PERCENTAGE	NUMBER	PERCENTAGE
Brighton	157	5	3 %	5	100 %
Fort Lupton	192	12	8	9	75
Longmont	117	4	3	3	75
Eaton	222	6	3	5	83
Fort Collins	104	10	10	9	90
Fort Morgan	47	2	4	0	0
Burlington	51	0	0	0	0
Lamar	119	3	3	3	100
Rocky Ford	203	9	4	7 (2 MOVED)	78
Pueblo	72	3	4	3	100
Alamosa	258	10	4	10	100
Grand Junction	63	4	6	3	75
Delta	86	4	5	4	100
Boulder	33	1	3	1	100
TOTAL:	1,724	73	4 %	62	85 %

* Reported as abnormals referred to an outside provider for follow-up diagnostic evaluation and care.

TABLE XX

ELEVATED BLOOD PRESSURE - INCIDENCE/FOLLOW-UP
- 1985 -

SITE	# SCREENED	ABNORMALS IDENTIFIED		ABNORMALS FOLLOWED-UP	
		NUMBER	PERCENTAGE	NUMBER	PERCENTAGE
Brighton	157	0	0 %	0	0 %
Fort Lupton	192	0	0	0	0
Longmont	115	1	1	1	100
Eaton	222	0	0	0	0
Fort Collins	106	1	1	1	100
Fort Morgan	47	0	0	0	0
Burlington	51	0	0	0	0
Lamar	118	0	0	0	0
Rocky Ford	203	1	.5	0 (Moved)	0
Pueblo	72	0	0	0	0
Alamosa	221	0	0	0	0
Grand Junction	63	1	2	1	100
Delta	90	0	0	0	0
Boulder	33	0	0	0	0
TOTAL:	1,690	4	0.2 %	3	75 %

TABLE XXI

SCOLIOSIS - INCIDENCE/FOLLOW-UP
- 1985 -

SITE	# SCREENED	ABNORMALS IDENTIFIED		ABNORMALS FOLLOWED-UP	
		NUMBER	PERCENTAGE	NUMBER	PERCENTAGE
Brighton	26	7	27 %	7	100 %
Fort Lupton	65	5	7	5	100
Longmont	13	1	8	1	100
Eaton	17	1	6	1	100
Fort Collins	4	0	0	0	0
Fort Morgan	3	0	0	0	0
Burlington	6	0	0	0	0
Lamar	1	1	100	1	100
Rocky Ford	10	0	0	0	0
Pueblo	7	0	0	0	0
Alamosa	12	1	8	1	100
Grand Junction	9	4	44	4	100
Delta	14	3	21	3	100
Boulder	3	1	33	1	100
TOTAL:	190	24	13 %	24	100 %

TABLE XXII
DENTAL PROBLEMS - INCIDENCE/FOLLOW-UP
- 1985 -

SITE	# SCREENED	ABNORMALS IDENTIFIED		ABNORMALS FOLLOWED-UP/ TREATMENT PROVIDED	
		NUMBER	PERCENT	NUMBER	PERCENT
Brighton	161	113	80 %	95	84 %
Fort Lupton	212	150	71	109	73
Longmont	116	89	77	84	94
Eaton	223	109	49	95	87
Fort Collins	91	74	81	60	81
Fort Morgan	48	18	37	18	100
Burlington	52	10	19	7	70
Lamar	114	58	51	54	93
Rocky Ford	188	115	61	79	69
Pueblo	70	41	59	35	85
Alamosa	257	178	69	87	49
Grand Junction	63	32	51	28	87
Delta	91	63	69	54	86
Boulder	33	14	42	11	79
TOTAL:	1,719	1,064	62 %	816	77 %

TABLE XXIII
DESCRIPTION OF DENTAL FOLLOW-UP NEEDED
- 1985 -

SITE	# SCREENED	NEED ROUTINE DENT. CARE		NEED EMERGENCY DEN. CARE	
		NUMBER	PERCENT	NUMBER	PERCENT
Brighton	161	100	62 %	13	8 %
Fort Lupton	212	132	62	18	8
Longmont	116	89	77	0	0
Eaton	223	99	44	10	4
Fort Collins	91	70	77	4	4
Fort Morgan	48	15	31	3	6
Burlington	52	10	19	0	0
Lamar	114	52	46	6	5
Rocky Ford	188	96	51	19	10
Pueblo	70	41	59	0	0
Alamosa	257	161	63	17	6
Grand Junction	63	32	51	0	0
Delta	91	59	65	4	4
Boulder	33	14	42	0	0
TOTAL:	1,719	970	56 %	94	6 %

TABLE XXIV
DENTAL FOLLOW-UP - STATUS OF TREATMENT/REASONS FOR NO TREATMENT
- 1985 -

SITE	# CHILDREN NEED. CARE	STAT. OF DENT. TREAT. RECEIVED		REASON WHY ABN. DID NOT REC. TREAT.			
		COMPLETE CARE	PARTIAL CARE	NOT REFER. (LOW PRIOR.)	NO CONS. FORM OR PAR. REF. OWN DENTIST	REFER. BUT MOV./NO TIME	POOR ATTENDANCE/ DROPPED OUT
Brighton	113	83	12	3	0	4	11
Fort Lupton	150	109	11	12	0	17*	1
Longmont	89	77	7	0	0	0	5
Eaton	109	91	4	3	0	7	4
Fort Collins	74	56	4	7	0	0	7
Fort Morgan	18	17	1	0	0	0	0
Burlington	10	0	7	1	0	2	0
Lamar	58	41	13	1	0	3	0
Rocky Ford	115	67	12	8	4	17	7
Pueblo	41	30	5	0	6	0	0
Alamosa	178	47	40	45	2	43	1
Grand Junction	32	27	1	0	0	0	4
Delta	63	43	11	7	0	2	0
Boulder	14	11	0	0	0	0	3
TOTAL:	1,064	699	128	87	12	95	43

* All 17 of these were enrolled in the night school program.

TABLE XXV
TYPE AND NUMBER OF DENTAL TREATMENT SERVICES IN DENTAL OFFICES
- 1985 -

SITE	DIAG.	PREVENTIVE	RESTORATIVE SURFACES	CROWNS/SP. MAINTAINER	ENDO.	ORAL SURGERY	SEALANTS	TOTAL SERVICE
Brighton	650	0	472	10	15	21	333	1,501
Fort Lupton	721	3	433	16	22	20	532	1,747
Longmont	397	0	376	10	11	18	289	1,101
Eaton	275	2	503	22	14	11	915	1,742
Fort Collins	240	2	394	12	4	9	38	699
Fort Morgan	50	0	49	22	8	17	0	146
Burlington	28	1	9	0	1	0	0	39
Lamar	81	208	224	20	14	7	213	767
Rocky Ford	253	0	343	54	25	46	57	778
Pueblo	244	88	148	16	12	11	66	585
Alamosa	257	13	403	12	17	25	35	762
Grand Junction	41	0	109	7	1	7	1	166
Delta	175	0	236	10	7	19	47	494
Boulder	78	0	67	0	0	5	21	171
TOTAL:	3,490	317	3,766	211	151	216	2,547	10,698

TABLE XXVI
COST* OF DENTAL SERVICES PROVIDED IN DENTAL OFFICES BY TYPE
- 1985 -

SITE	DIAG.	PREV.	SUR-FACES	CROWN/SP. MAINT.	ENDO.	ORAL SURG.	SEALANTS	TOTAL
Brighton	$ 0	$ 0	$1,500	$ 300	$ 100	$ 100	$ 250	$ 2,250
Ft. Lupton	0	0	1,500	300	100	100	250	2,250
Longmont	63	0	816	106	16	36	77	1,114
Eaton	100	20	2,562	300	100	100	900	4,082
Ft. Collins	728	13	3,733	482	230	110	142	5,438
Ft. Morgan	184	0	383	1,046	141	154	0	1,908
Burlington	175	10	186	0	18	0	0	389
Lamar	0	1,152	3,408	909	356	88	760	6,673
Rocky Ford	868	0	3,378	1,359	247	544	286	6,682
Pueblo	603	440	1,505	544	133	159	484	3,868
Alamosa	951	98	4,435	315	361	298	175	6,633
Grd. Junct.	0	0	619	200	100	100	0	1,019
Delta	626	0	2,272	226	147	129	217	3,617
Boulder	421	0	624	0	0	94	95	1,234
TOTAL:	$4,719	$1,733	$26,921	$6,087	$2,049	$2,012	$ 3,636	$47,157

* Includes cost from all sources except medicaid or private insurance.

TABLE XXVII
PREVENTIVE DENTAL SERVICES BY DENTAL HYGIENISTS
Prophylaxis, Topical Fluoride Application, Dental Counseling
- 1985 -

SITE	NUMBER SCREENED	RECEIVING PREVENTIVE SERVICES	
		NUMBER	PERCENT
Brighton	161	136	84 %
Fort Lupton	212	167	79
Longmont	116	112	96
Eaton	223	199	89
Fort Collins	91	66	72
Fort Morgan	48	42	87
Lamar	114	104*	91
Rocky Ford	188	162	86
Pueblo	70	41	59
Alamosa	257	136	53
Grand Junction	63	54	86
Delta	91	90	99
Burlington	52	0	0
Boulder	33	27	82
TOTAL:	1,719	1,336	78 %

* In Dental Office

TABLE XXVIII
NUTRITION PROBLEMS - INCIDENCE/FOLLOW-UP
- 1985 -

SITE	# SCREENED	NUT. PROB. INCIDENCE		NUT. PROB. FOLLOWED -UP	
		NUMBER	PERCENT	NUMBER	PERCENT
Brighton	159	103	65 %	100	97 %
Fort Lupton	219	119	54	86	72
Longmont	116	67	58	67	100
Eaton	222	142	64	106	75
Fort Collins	133	73	55	71	97
Fort Morgan	47	30	64	30	100
Lamar	119	72	61	65	90
Rocky Ford	203	89	44	72	81
Pueblo	72	46	64	41	89
Alamosa	260	114	44	91	80
Grand Junction	63	42	67	31	74
Delta	90	59	66	59	100
Boulder	33	21	64	21	100
TOTAL:	1,736	977	56 %	840	86 %

TABLE XXIX
BELOW NORMAL HEMATOCRIT - INCIDENCE/FOLLOW-UP
- 1985 -

SITE	# SCREENED	ANEMIA IDENTIFIED		ANEMIA FOLLOWED-UP	
		# ABNORMAL HCT	% ABNORMAL VS. SCREENED	# RECEIVING FOLLOW-UP	% ABN. VS. # FOLLOWED-UP
Brighton	159	67	42 %	63	94 %
Fort Lupton	219	74	34	63	85
Longmont	116	22	19	22	100
Eaton	222	72	32	51	71
Fort Collins	133	17	13	17	100
Fort Morgan	47	18	38	18	100
Lamar	119	37	31	30	81
Rocky Ford	203	44	22	38	86
Pueblo	72	30	42	26	87
Alamosa	260	32	12	31	97
Grand Junction	63	23	37	23	100
Delta	90	29	32	29	100
Boulder	33	9	27	9	100
TOTAL:	1,736	474	27%	420	89 %

TABLE XXX
UNDERWEIGHT - INCIDENCE/FOLLOW-UP
- 1985 -

SITE	# SCREENED	UNDERWEIGHT IDENT.		UNDERWEIGHT FOLLOWED-UP	
		NUMBER	PERCENT	NUMBER	PERCENT
Brighton	159	20	12 %	20	100 %
Fort Lupton	219	11	5	6	55
Longmont	116	5	4	5	100
Eaton	219	11	5	8	73
Fort Collins	133	6	5	6	100
Fort Morgan	47	1	2	1	100
Lamar	119	4	3	4	100
Rocky Ford	203	12	6	9	75
Pueblo	72	5	7	4	80
Alamosa	260	11	4	9	82
Grand Junction	63	21	33	14	67
Delta	90	2	2	2	100
Boulder	33	5	15	5	100
TOTAL:	1,736	114	6 %	93	82 %

Underweight is defined as weight for height at or below the 10%.

TABLE XXXI
OVERWEIGHT - INCIDENCE/FOLLOW-UP
- 1985 -

SITE	# SCREENED	OVERWEIGHT IDENTIFIED		OVERWEIGHT FOLLOWED-UP	
		NUMBER	PERCENT	NUMBER	PERCENT
Brighton	159	12	8 %	12	100 %
Fort Lupton	219	41	19	32	78
Longmont	116	17	15	17	100
Eaton	222	20	9	16	80
Fort Collins	133	37	28	35	95
Fort Morgan	47	11	23	11	100
Lamar	119	30	25	25	83
Rocky Ford	203	29	14	24	83
Pueblo	72	13	18	13	100
Alamosa	260	34	13	27	79
Grand Junction	63	5	8	3	60
Delta	90	15	17	15	100
Boulder	33	4	12	4	100
TOTAL:	1,736	268	15 %	234	87 %

Overweight is defined as weight for height at or above the 90%.

TABLE XXXII
SHORT STATURE - INCIDENCE/FOLLOW-UP
- 1985 -

SITE	# SCREENED	SHORT-STATURE IDENTIFIED		SHORT-STATURE FOLLOWED-UP	
		NUMBER	PERCENT	NUMBER	PERCENT
Brighton	159	42	26 %	41	98 %
Fort Lupton	219	37	17	25	68
Longmont	116	23	20	23	100
Eaton	222	57	26	47	82
Fort Collins	133	34	26	26	76
Fort Morgan	47	12	26	12	100
Lamar	119	21	18	19	90
Rocky Ford	203	40	20	27	68
Pueblo	72	9	13	9	100
Alamosa	260	34	13	19	56
Grand Junction	63	31	49	19	61
Delta	90	24	27	24	100
Boulder	33	8	24	8	100
TOTAL:	1,736	372	21 %	299	80 %

Short stature is defined as height for age at or below 10%.

TABLE XXXIII
"OTHER"* NUTRITION PROBLEMS - INCIDENCE/FOLLOW-UP
- 1985 -

SITE	# SCREENED	"OTHER" PROB. IDENTIFIED		"OTHER" PROB. FOLLOWED-UP	
		NUMBER	PERCENT	NUMBER	PERCENT
Brighton	159	11	7 %	11	100 %
Fort Lupton	219	0	0	0	0
Longmont	116	3	3	3	100
Eaton	222	33	15	26	79
Fort Collins	133	6	5	6	100
Fort Morgan	47	2	4	2	100
Lamar	119	0	0	0	0
Rocky Ford	203	4	2	3	75
Pueblo	72	0	0	0	0
Alamosa	260	10	4	10	100
Grand Junction	63	1	2	1	100
Delta	90	5	6	5	100
Boulder	33	3	9	3	100
TOTAL:	1,736	78	4 %	70	90 %

"Other" includes - hypertension, food allergies, dental, feeding problems.

TABLE XXXIV
HEALTH EDUCATION SERVICES BY NURSES
- 1985 -

CAMP and SITE	FAMILY NIGHT PRESENTATIONS		CLASSROOM ENCOUNTERS		STAFF IN-SERVICE	
	# SESSIONS	#PEOPLE	# SESSIONS	#PEOPLE	# SESSIONS	#PEOPLE
Brighton	1	5	6	108	1	17
Fort Lupton	1	28	5	162	1	16
Longmont	0	0	0	0	1	14
Eaton	1	25	4	64	1	18
Fort Collins	2	3	6	100	9	121
Fort Morgan	1	79	1	6	0	0
Burlington	0	0	0	0	0	0
Lamar	3	50	3	45	2	32
Rocky Rocky	1	45	7	75	3	40
Pueblo	1	121	11	175	3	18
Alamosa	3	74	9	166	7	120
Grand Junction	1	5	4	63	1	12
Delta	0	0	11	271	1	8
Boulder	0	0	3	28	1	9
TOTAL:	15	435	70	1,263	31	435

TABLE XXXV
HEALTH EDUCATION SERVICES BY DENTAL HYGIENISTS
- 1985 -

SITE	FAMILY NIGHT PRESENTATIONS		GROUP ENCOUNTERS		STAFF IN-SERVICES	
	#SESSIONS	#PEOPLE	#SESSIONS	#PEOPLE	#SESSIONS	#PEOPLE
Brighton	1	150	5	111	0	0
Fort Lupton	0	0	13	145	1	13
Longmont	1	4	5	100	1	4
Eaton	0	0	0	0	0	0
Fort Collins	0	0	0	0	0	0
Fort Morgan	2	150	4	63	2	15
Lamar	1	16	4	84	1	25
Rocky Ford	0	0	8	132	2	50
Pueblo	1	150	11	165	1	7
Alamosa	0	0	0	0	0	0
Grand Junction	0	0	4	52	0	0
Delta	0	0	0	0	0	0
Boulder	0	0	0	0	0	0
TOTAL:	6	470	54	852	8	114

TABLE XXXVI
HEALTH EDUCATION SERVICES BY NUTRITIONISTS
- 1985 -

SITE	FAMILY NIGHT		GROUP ENCOUNTER		STAFF IN-SERVICES	
	#SESSIONS	#PEOPLE	#SESSIONS	#PEOPLE	#SESSIONS	#PEOPLE
Brighton	1	150	14	106	2	18
Fort Lupton	0	0	7	75	2	22
Longmont	0	0	6	133	1	15
Eaton	0	0	7	84	1	25
Fort Collins	2	130	6	111	2	4
Fort Morgan	1	80	7	170	1	12
Lamar	1	16	4	102	1	25
Rocky Ford	0	0	3	38	2	65
Pueblo	0	0	16	99	1	6
Alamosa	0	0	10	196	1	25
Grand Junction	0	0	0	0	1	12
Delta	1	30	5	77	1	20
Boulder	0	0	3	25	0	0
TOTAL	6	406	88	1,216	16	249